

WaterTalk

Alaska

Idaho

Oregon

Washington

U.S. Environmental Protection Agency, Region 10 Bulletin - EPA 910/9-92-043

August 2004



Celebrating Our Estuaries

Saturday, September 25, 2004 marks **National Estuaries Day**, a yearly celebration of the places where fresh water from rivers mixes with salt water in the ocean. Lagoons, bays, and sloughs are examples of estuaries. At least two-thirds of our commercial fish and shellfish in the U.S. use coastal habitats as spawning grounds and nurseries. The wetlands associated with estuaries protect uplands from flooding. Estuaries also offer many recreational benefits, such as swimming, boating, and bird watching.

National Estuaries Day is an interagency campaign to celebrate the importance of estuaries and the need to protect them. You can celebrate this event by participating in **EstuaryLive** on September 23 and 24, 2004. As the feature event for National Estuaries Day 2003, EstuaryLive takes you on an interactive field trip of our nation's estuaries. You can join from your home or classroom. The entire journey takes place over the Internet.

This year's program features seven estuaries from around the country, including Puget Sound in Washington and South Slough in Oregon.

Naturalists from NOAA's National Estuarine Research Reserve System and the U.S. EPA's National Estuary Program will take participants on a journey through each unique ecosystem. Participants can interact with the tour guides by emailing questions during the field trips.

EPA's National Estuary Program was established by Congress in 1987 to improve the quality of estuaries of national importance. Visit www.estuaries.gov for details.

John Iani Resigns as EPA Region 10 Administrator

John Iani, the Regional Administrator of the EPA Region 10 office, resigned his position in early August after almost three years leading the Agency's work in Alaska, Idaho, Oregon, and Washington. Iani, an attorney, will return to the private sector to practice law. EPA Deputy Regional Administrator, Ron Kreizenbeck, a 30-plus year veteran of the Agency, will serve as Acting Regional Administrator until a replacement is appointed.

In This Issue...



EPA News to update you on agency activities, pages 1 and 2.



Tools to clue you in on resources, publications, opportunities, and services, page 3.



WaterWords to share stories from communities around the Greater Northwest, page 4.



Spotlight to showcase success stories and environmental stars, page 5.



Ecosystem to provide news that goes beyond water topics, pages 6-9.

Fish Tissue Data Available

EPA has released second-year data from the **National Study of Chemical Residues in Lake Fish Tissue**. This study is a national four-year effort to assess the condition of lakes and reservoirs in the lower 48 states. The study will provide the first national estimate for 268 PBT (persistent, bioaccumulative, and toxic) chemicals and will help track reductions of these chemicals in freshwater fish. EPA is analyzing fish samples for mercury, arsenic, polychlorinated biphenyls (PCBs), and dioxins/furans, along with many pesticides and other organic chemicals, such as phenols and chlorobenzenes. Chemical analysis of all fish samples should be complete by the end of 2004. EPA plans to finish statistical analysis of the cumulative four-year fish tissue data set in 2005 and produce a final report in 2006. Learn more about the fish tissue study by visiting our website at www.epa.gov/waterscience/fishstudy.

Final Rule for Aquaculture Released

On June 30, EPA finalized a rule to establish wastewater controls for concentrated aquatic animal production facilities, also known as fish farms. The regulation applies to about 245 facilities that generate wastewater from their operations and discharge that wastewater directly to waters of the United States. These requirements will be reflected in "NPDES" wastewater discharge permits for the affected fish farms. The aim is to help reduce discharges of conventional pollutants (mainly Total Suspended Solids), non-conventional pollutants (such as nutrients, drugs and chemicals) and toxic pollutants (metals and PCBs). Learn more about the rule by visiting EPA's Internet site at www.epa.gov/guide/aquaculture/.

EPA Proposes Federal Bacteria Standards for Beaches



In July, EPA took an important step to further protect the quality of the nation's beaches. EPA proposed more protective health-based federal water quality standards for states which have not yet adopted these standards. The Beaches Environmental Assessment and Coastal Health (BEACH) Act of 2000 requires each state with coastal recreation waters to adopt health-based bacteria standards that are "as protective of

human health as" EPA's 1986 criteria for bacteria. The Act also requires EPA to promptly propose regulations for states that fail to adopt these criteria by April 10, 2004. EPA expects to publish a final rule later in 2004, after responding to public comment. Learn more about the beach protection program and this proposal by visiting www.epa.gov/beaches/.

TV Special about Watersheds on Free Video



The video *After the Storm* is available free from EPA.

Forget about late fees. EPA now has free videos of the new ½ hour television special about watersheds, co-produced by EPA and The Weather Channel. **After the Storm** premiered on The Weather Channel in February. The documentary explores the connection between weather and watersheds and the importance of watershed protection. It shows how runoff can carry pollutants from streets, lawns, and farms into our waterways. **After the Storm** gives insights into solutions to this water quality crisis and explains simple things people can do to protect their watersheds.

VHS copies of the **After the Storm** program are available free by contacting the National Service Center for Environmental Publications at 513-489-8190 or 800-490-9198 or send an email to ncepimal@one.net. Please request **After the Storm** (VHS) and refer to document number EPA 840-V-04-001.

This tape is intended for education and communication purposes in classrooms, at conferences, and so on. However, the tape should not be reproduced, distributed, broadcast or cablecast, without the express written permission of EPA. If you have any questions, send them to EPA at weatherchannel@epa.gov. The VHS copies will include captioning for the deaf or hard of hearing.

New EnviroMapper is Now Available

EPA has released a new version of **EnviroMapper for Water**. This version provides a Web-based mapping connection to a wealth of water data. You can use it to view and map data, such as:

- the uses assigned to local waters by your state waters
- the reasons why waters are impaired
- water quality monitoring information
- closures of swimming beaches and
- the location of dischargers.

Maps can be viewed at the national, regional, state or local levels. This latest release of EnviroMapper for Water (Version 3.0) features several new layers of water data including EPA's national water quality database STORET, National Estuary Program study areas, and the location of nonpoint source projects. Other enhancements make it easier to locate and view these data. Instructions describe how to incorporate the resulting map into your own web page. Visit the website at www.epa.gov/waters/enviromapper/.



EPA Launches Website for Septic Systems

EPA announces a new and improved website that provides information on septic systems to homeowners, state and local governments, and industry professionals. EPA's new website provides guidance, technical information, management guidelines, and a wide variety of other information. The information can help citizens manage their septic systems and help state and local officials strengthen their regulation and management of these potential water-pollution sources. This new site is part of EPA's ongoing effort to improve its website and to provide "one-stop" shopping on topics of interest to the general public. You are invited to visit our new septic-systems website at www.epa.gov/owm/septic.

Think Before You Flush that Pill



We used to think the best way to dispose of old or leftover medicine was to flush it down the toilet. That way kids and animals wouldn't come in contact with it and become poisoned. But that's not true anymore. Now environmental scientists are warning people: "Do not flush."

Antibiotics, hormones, painkillers, antidepressants, and an array of other medications are now finding their way into the nation's waterways—raising questions about potential health and environmental effects.

EPA is studying whether to develop formal recommendations for what to do with old or leftover drugs.

Long-term effects of these drugs aren't known, but environmental scientists worry that exposure to even tiny amounts might cause harm, at least to the ecology. Studies have linked hormone exposure to reproductive side effects in fish. Scientists also worry about environmental exposure to antibiotics because they fear microbes may become drug resistant and eventually become "super germs."

The Food and Drug Administration (FDA) is reevaluating its policy about labeling drugs with instructions for disposal. In addition, some states are working to allow nursing homes to donate medications to indigent patients, as long as they weren't opened or tampered with in any way. Until there's labeling, though, environmental experts offer this advice:

- Take all of a prescribed medication unless there's a good reason not to, such as a bad side effect.
- Trash is better than the toilet. Take proper precautions against children or pets accidentally ingesting them, such as breaking up capsules and crushing tablets and then putting the remains back in the original

container. Tape the container, and then double bag it before tossing.

- Check to see if there's a local household hazardous waste collection site that will take old prescription drugs.
- The FDA suggests asking pharmacies to take old medication back.

(Adapted from On Tap Magazine)

Get Out Those Test Tubes! Water Monitoring Day Coming

Get your test tubes ready. **World Water Monitoring Day** is set for October 18! America's Clean Water Foundation and the International Water Association invite citizens and organizations from around the globe to share in the experience of water quality monitoring.

From September 18 to October 18, citizens throughout the world community can monitor the quality of their local watersheds and enter their results into an international database.

In each of the first two years of this event, over 5,000 monitoring sites were registered in the World Water Monitoring Day database. An estimated 75,000 people took part each year. The Foundation launched this event on October 18, 2002 as a part of the Year of Clean Water, celebrating the 30th anniversary of the federal Clean Water Act.

Don't have a test kit? Call EPA's Public Environmental Resource Center at 1-800-424-4372 or 206-553-1200 to borrow a water quality testing kit, complete with instructions. The kits are suitable for use by students. To learn more, or to register, visit the website at www.worldwatermonitoringday.org.

WATERWORDS

Get the Lead Out (Of Your Fishing Gear)

In the United States and Canada, it is estimated that hundreds of tons of lead fishing tackle are deposited in marine and fresh waters each year, mostly through the loss of sinkers and jigs while fishing. More than 20 species of water birds can accidentally swallow lead fishing tackle while feeding. Birds normally ingest small pebbles, "grit," which enables their gizzard to break down fish bones, a normal part of their diet. Unfortunately, birds often mistake lead fishing tackle for the pebbles they normally consume.

Ingestion of lead fishing sinkers or jigs results in lead toxicity, and eventually death, as the lead is broken down and absorbed into the bloodstream.

Efforts to reduce water bird deaths from lead poisoning have been made in Great Britain and Canada through environmental policies banning the use of lead fishing sinkers and jigs. Fish and Wildlife Service is currently considering banning the use of lead fishing tackle on all national wildlife refuges. If you fish, please remove "split shot," "egg sinker," and "lead-headed jigs" from your tackle box. The birds thank you.

SPOTLIGHT

Students Honored with President's Environmental Youth Award

Earlier this year, seven students from Eatonville High School were honored at a White House ceremony with the President. They also met with congressional representatives, were honored at a luncheon, and toured the White House. The students are the most recent Region 10 recipients of the **President's Environmental Youth Award**.

Presidential Award Winners:
(teachers James Clague and Lucy Fountain, sponsors)
Kristin Fitzer Jennifer Nordstrom
Jessica Herbrand Mike Pawul
Sharon Jadin Emily Slayton
Tom Mitchell

The students showed outstanding environmental leadership in many watershed stewardship projects which benefitted their community. For example, the students conducted water quality studies on five streams. The data were entered into the Washington Virtual Classroom water quality database to be used for analysis.

After completing two on-line salmon classes, the students also worked with the Nisqually Indian Tribe to restore local salmon runs. They helped restore habitat by planting vegetation along streams that have been impacted by agricultural activities, forest harvesting, and poor land management practices.

The students also planned a watershed summit to bring community participants together to share knowledge and experiences. The students published a report that outlines trends in the



Students from Eatonville, WA get President's Award.

Nisqually watershed over the last ten years, and moderated a conference discussion on salmon recovery with students from other school districts. The students also made presentations on the watershed stewardship projects that the local schools sponsor, and they worked with elementary students to demonstrate water quality studies and conservation activities.

The President's Environmental Youth Awards program is open to youth from kindergarten to high school. The program aims at encouraging individuals, classes, or groups to promote environmental awareness and positive community involvement. For details, visit www.epa.gov/enviroed/awards.html. Or call Sally Hanft, at 206/553-1207 or 1-800-424-4372, or email hanft.sally@epa.gov.

Simple Steps to: Conserve Gas, Save Money, Help the Environment

As summer winds to a close, many folks plan to take that one last road trip. And with gas prices being what they are, well. . . . EPA recommends several simple steps to drivers to reduce their impact on the environment and their wallets.

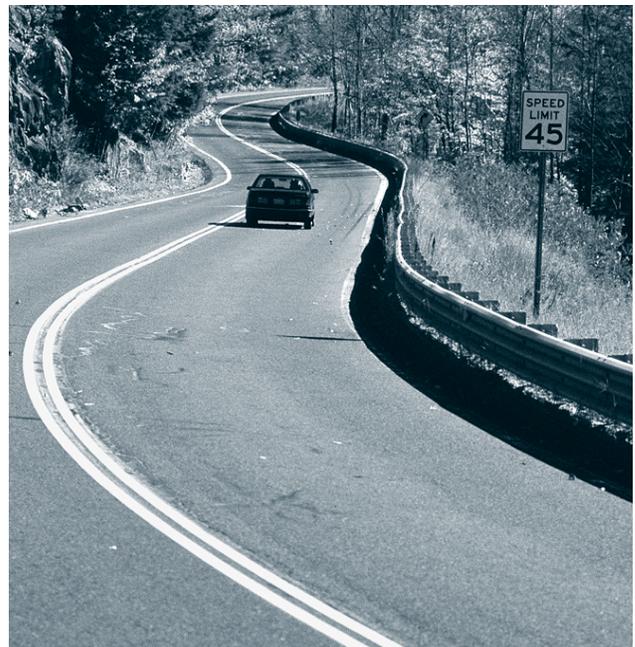
To get the most out of each gallon of gas and reduce tailpipe emissions, EPA encourages the following steps:

- **Driving Wisely:** Sudden starts and stops, excessive speeds, extra weight in the trunk, unnecessary idling, long drive-through lines, and revving or warming up the engine waste fuel. Using cruise control on the highway helps maintain a constant speed and, in most cases, will save gas. Using overdrive gears slows engine speed, saves gas, and reduces engine wear. Observe speed limits.
- **Regular Maintenance:** Routine car maintenance extends a car's life, increases its resale value, and improves gas mileage. Properly inflated and aligned tires, a tuned engine, and regularly changed oil and air filters are a few simple steps that help ensure fuel efficiency.
- **Advanced Trip-Planning:** Planning routes, avoiding peak traffic periods, combining errands, and eliminating backtracking will save gas, prevent wear and tear, and save time.
- **Smart Refueling:** Topping off the tank creates harmful emissions and wastes money. Gasoline vapors are harmful to breathe, contribute to ground-level ozone formation and are a source of toxic air pollutants such as benzene. Evaporation from the spillage of gas from overfilling can occur, contributing to the air pollution problem. For more information on the environmental benefits of proper refueling, visit: <http://www.epa.gov/donttopoff/index.htm>.

For more gas mileage tips, visit:
www.fueleconomy.gov/feg/drive.shtml.

Consumers have more choices than ever when it comes to fuel economy and protecting the environment. EPA encourages consumers to consider fuel economy when purchasing a new vehicle. For help in selecting the cleanest, most fuel-efficient vehicle to match individual needs, visit EPA's Green Vehicle Guide at:
www.epa.gov/greenvehicle.

EPA also works with businesses to help consumers find more efficient and environmentally friendly ways to commute to the office. EPA's Best Workplaces for Commuters program encourages companies to provide incentives to employees to choose cleaner modes of transportation, including ride-sharing and whenever possible walking, biking, public transportation, or tele-commuting. For more information, visit: <http://www.bestworkplacesforcommuters.gov>.



Observing speed limits benefits the environment.

EPA Awards \$4 Million for Brownfield Redevelopment in Northwest

Northwest states and communities were awarded just over \$4 million in June in the latest round of federal aid made available by EPA's national "**Brownfields**" redevelopment initiative. As part of EPA's efforts to promote economic revitalization while safeguarding the environment and public health, the Agency is awarding nearly \$76 million in Brownfields grants to communities nationwide.

The Brownfields Program reflects a model of environmental protection which is locally-based, forges public-private partnerships, and promotes innovation and creativity.

By encouraging redevelopment of hundreds of thousands of America's abandoned and contaminated waste sites, EPA's Brownfields program has leveraged more than \$5.8 billion in private investment, helped create more than 27,000 jobs, and resulted in the assessment of more than 4,500 properties nationally.

EPA expects to publish guidelines on or about September 1, 2004, for the 2005 Brownfields assessment and cleanup grants. Proposals will likely be due by October 31, 2004 for award in the summer of 2005.

Under some circumstances, the Clean Water State Revolving Loan Funds, which the states administer with funds from EPA, may also be a source of funding for Brownfields cleanups that protect or restore water quality. Contact EPA or your State Revolving Loan Fund manager if you are interested in exploring this possibility.

To learn about each of 24 Brownfield grants awarded in Region 10, visit the website at www.epa.gov/swerosps/bf/archive/pilot_arch.htm. More more information, contact Tim Brincefield at 206-553-1200, 1-800-424-4372, or email brincefield.timothy@epamail.epa.gov.

EPA Awards Collaboration Funds

EPA recently awarded cooperative agreements to three community-based organizations in the Pacific Northwest. The money will help launch projects that address local environmental and public health issues. Each of the projects will use a collaborative problem-solving approach to ensure that all people are receiving equal environmental protection, regardless of race, color, national origin, or income. The three projects are among 30 nationally totaling \$3,000,000.

The projects include a beach monitoring, closure and notification program along the east shore of Puget Sound. The Indochinese Cultural and Service Center in Pierce County, Washington will work with the community to monitor toxicity and issue alerts for Asian Pacific Islanders. The Community Coalition for Environmental Justice of Seattle will focus on an education program on exposure to indoor and outdoor neurotoxins for the residents of South Park, White Center, and Beacon Hill in Seattle. Finally, Portland's Environmental Justice Action Group will focus on addressing the problems of asthma and hazardous air pollutants in the North/Northeast neighborhoods of Portland, Oregon.

"Every person deserves the same protections from environmental hazards regardless of their race or cultural and traditional backgrounds," said Melanie Wood, Regional Director for the Office for Civil Rights and Environmental Justice. "These groups focus on breaking down the barriers of communication and empowering the community to know when and how to take the steps necessary to protect themselves."

Each organization will receive \$100,000 over three years under the **Environmental Justice Collaborative Problem-Solving Cooperative Agreement Program**. To accomplish the goals of these projects, the recipients will form partnerships with other affected community and grassroots organizations, local governments, health care providers, industry, and academia. This program was established in 2003 to provide financial assistance to eligible, affected local community-based organizations. For details, contact Cecilia Contreras, EPA, at 206-553-2899, 1-800-424-4372, or email contreras.cecilia@epamail.epa.gov.



Beneficial Landscaping

Dragonflies, Living Flashes of Light, Part II

by Ralph Thomas Rogers, EPA's resident dragonfly expert

In the spring issue of *WaterTalk*, Ralph Thomas Rogers explained the life history of dragonflies and damselflies. Here in Part 2, he tells how to create habitat for them—and a cool summer oasis for your landscape!

Creating a Dragonfly-Friendly Pond

Last issue, I presented a general Odonate (dragonflies and damselflies) life history. For those of you who have been inspired and those who are already avid Odonate watchers, here are tips for making backyard or farm ponds more Odonate friendly. If you do not have a pond, I have included references for pond construction at the end of this article.

1. For greater species diversity it is recommended that an Odonate pond have a minimum surface area of 40 square feet (i.e. a circular 7-foot diameter pond or 8-foot by 5-foot oval pond).
2. To attract more kinds of our most common Odonates, your pond should hold water at a fairly constant level year-round. At the same time, different dragonfly nymphs prefer different conditions, so the depth of the pond should vary by providing a shallow sloping edge. For milder climates, the maximum depth should be a minimum of 2 feet deep. In colder climates where the pond might freeze, it should be at least 3 feet deep. Deep areas also provide refuge where nymphs can be safe from some predators (i.e. raccoons).
3. Odonates are most active on warm, sunny days. Make sure the pond has some sunny spots where they can roost and warm themselves. This may require periodic removal of tall vegetation. A few large, light-colored, flat rocks and logs along the pond margin also provide good basking sites.
4. The pond bottom should be 'mucky' mud and sand (allow some organic debris such as leaf litter to collect) to provide egg-laying habitat for some species of Odonates. This bottom habitat is also essential for those Odonate nymphs that burrow.

5. Although Odonates don't require plants as a source of food, wetland and aquatic plants are still an important part of their habitat. It is best to stock your pond with a variety of native plants that can be found growing naturally in your region.

- *Emergent plants such as cattail and bulrush that grow along the shallow margins are important to Odonates for many reasons. Nymphs crawl up the plants when it's time to emerge as adults. The plant stems provide places for adults to rest, scan for prey, and watch for mates. Also, females of some species need emergent plants to lay their eggs on or within the plant tissue.*
- *Submerged or floating plants are also important. In addition to adding oxygen to the water and removing carbon dioxide, they also provide hiding places for certain Odonate nymphs, as well as shelter and food for their prey.*



You can create a backyard wildlife pond.

6. Avoid the use of chemicals such as fertilizers, herbicides or insecticides in the pond or in areas that drain toward the pond.
7. Do **NOT** stock the pond with fish!
8. Finally, consider adding a bucket of water from a natural pond once a year as a source of microorganisms that are important for a healthy pond ecosystem. Make sure that 'natural' pond you from which you get that bucket doesn't have invasive species that could contaminate your pond.

Happy Odonate Watching!

Select references for dragonfly watching in Region 10:

1. Cannings, Robert A. 2002. *Introducing the Dragonflies of British Columbia and the Yukon*. Royal British Columbia Museum, Canada. [ISBN 0-7726-4637-6]
2. Dunkle, Sidney W. 2000. *Dragonflies Through Binoculars - A Field Guide to Dragonflies of North America*. Oxford Univ. Press, NY. [ISBN 0-19-511268-7]
3. Paulson, Dennis. 1999. *Dragonflies of Washington*. Seattle Audubon Society, WA. [ISBN 0-914516-15-9]

Select references for planning and constructing wildlife ponds:

1. Link, Russell. 1999. *Landscaping for Wildlife in the Pacific Northwest*. Univ. of Washington Press, Seattle. [ISBN 0-295-97820-1]
2. Weston, Shann, Janice Richardson and Susan Adams Gunn (eds.). 2001. *Naturescaping-A Landscaping Partnership With Nature*, 3rd Edition. Oregon Dept. of Fish & Wildlife, Portland.

For more information about dragonflies and damselflies, contact Ralph Thomas Rogers at 206/553-4012 or rogers.ralph@epa.gov. For more general information about Beneficial Landscaping, contact Elaine Somers at 206/553-2966 or somers.elaine@epa.gov, or visit the website at www.epa.gov/r10earth/bl.htm.



CALENDAR



August 12-13
Power Supplies in the Pacific Northwest, Seattle, WA. Law Seminars International, www.clenews.com/LSI/04/04powa.htm, 1-800-854-8009.

August 17-20
Northwest Aquatic and Marine Educators Conference: It's the Water, Celebrating South Puget Sound, Olympia, WA, www.nameconference.org.

September 5-9
International Conference on Greenhouse Gas Control Techniques, Vancouver, Canada, www.ghgt7.ca/main.html.

September 12-14
Annual Biosolids Management Conference, Resort at the Mountain, Welches, OR. 206-684-1145, www.nwbiosolids.org.

September 12-15
National Conference on Coastal and Estuarine Habitat Restoration, Seattle, WA, www.estuaries.org, 703-524-0248.

September 12-17
Watershed Restoration Institute 2004, Bainbridge Island, WA, Jennifer Zielinski, Center for Watershed Protection, 410-461-8323 or visit www.cwp.org.

September 18
Portland Harbor Superfund Field Day in Cathedral Park, Portland, OR. Judy Smith, EPA, 503-326-6994.

September 23-24
EstuaryLive, Internet field trip of 7 national estuaries, www.estuaries.gov.

September 25
National Estuaries Day, www.estuaries.gov.

October 2
On Board for Puget Sound, Bellingham, WA. Free workshop for boaters by People for Puget Sound, Britta Eschete, 360-336-1931.

October 18
World Water Monitoring Day, www.worldwatermonitoringday.org.

November 14-18
Society of Environmental Toxicology and Chemistry World Congress, Portland, OR, www.setac.org.



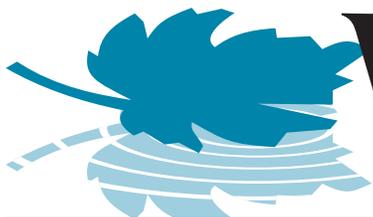
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WaterTalk
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WaterTalk

Alaska Idaho Oregon Washington

WaterTalk is published quarterly by the U.S. Environmental Protection Agency, Region 10. *WaterTalk* seeks to be a useful tool for those who protect water resources and ecosystems in communities of the Greater Pacific Northwest by providing practical resources and relevant agency news.

You are invited to contribute items for publication. Submittal deadline is the 15th day of the month before publication. *WaterTalk* articles can be used in other publications. Please give credit to *WaterTalk*.

For mailing list changes, or to contact the editor, call Andrea Lindsay at 206-553-1896 or 1-800-424-4EPA x1896, or e-mail lindsay.andrea@epa.gov.

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